# PLAYING WITH PATTERNS

INTRO TO COMPUTER SCIENCE STORYTIME

# **OVERVIEW**

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Storytime Element	Comment
Opening Song	Use the same song every time.
Introduction	Today's storytime is about patterns. Using and
	spotting patterns in computer code is an
	important part of computer science. Finding
	patterns in the sounds of words can also help
	children develop phonological awareness.
Letter of Day: "P, p"	P for patterns, Pete, play, purple, pink, please
Book 1: "Pattern Fish"	The fish in this book all have colorful patterns,
Written by Trudy Harris, Illustrated by Anne	and the text has a lot of fun rhymes. Let's see if
Canevari Green	we can get all of the patterns right.
Flannel Activity: Patterns with Shapes	Use different felt shapes to create patterns.
Book 2: "Pete the Cat: I Love My White Shoes"	This book is a fun way for kids to find the pattern
Written by Eric Litwin, Illustrated by James Dean	in the story.
Song: "The Hokey Pokey"	This song makes it easy for kids to understand
	the pattern of movement and dance along.
Book 3: "The Game of Patterns"	This book is full of patterns – how many can you
Written and illustrated by Hervé Tullet	spot? Being able to spot a pattern or a difference
	in a pattern is an important computer science
	skill.
Writing Activity: Drawing Patterns	Draw patterns with the children on a large piece
	of paper or white board.
Closing Comment	Pattern recognition is both an important
	computer science skill and early literacy skill.
	Playing with patterns can help your child develop
	their abilities.
Closing Song	Use the same song every time.
Extension Activity: Rhythm Instruments	Use rhythm instruments to create a pattern of
	sound. Guide the children through the pattern
	and then let them make up one of their own.

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# **OPENING SONG**

Use the same opening song during each storytime so that families know what to expect. Consistent elements of your storytime create an environment where kids know the rules (or the code!) for your program.

# INTRODUCTION

Welcome to storytime! This is a special computer science storytime where we will explore a very important part of computer programming: patterns. Patterns can create consistency within a computer program – that means it will function the same way every time – and are also important for early literacy. Finding patterns in the sounds of words (like identifying rhymes) can help children develop phonological awareness, which is an important early literacy skill. Today, we will read books with different types of patterns and even try to make some of our own.

# LETTER OF THE DAY: P

Our letter of the day is "P". What sound does "P" make? Show an upper-case and lower-case "P". Ask: Do they look the same? Do they sound the same? What are some words that begin with "P"? Write down some of the words they suggest and include the word "pattern."

**Say:** During today's storytime, we will talk about patterns, which means recognizing when something repeats itself. We'll read books about patterns and make our own patterns.

# **BOOK 1: "PATTERN FISH"**

WRITTEN BY TRUDY HARRIS, ILLUSTRATED BY ANNE CANEVARI
GREEN

The fish in this book all have colorful patterns, and the text has a lot of fun rhymes. Let's see if we can get all of the patterns right.

**After the book is over:** Review some of the different patterns from the "About Patterns" section at the back of the book, and flip back through to show some of the "secret patterns" in the borders of the pages.



**Say to Caregivers:** In addition to being a great introduction to patterns, this book also has examples of text where children complete the rhyme. Understanding rhyming words and how different sounds rhyme an important early literacy skill and helps children develop phonological awareness.

#### **ACTIVITY: FELT PATTERNS WITH SHAPES**

Cut out different shapes in felt and have the children help you make patterns with them. You can also use different colors of felt, and sort the pieces into different colors or shapes before making patterns. Try to recreate some of the patterns from the book "Pattern Fish."

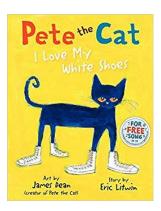
# BOOK 2: "PETE THE CAT: I LOVE MY WHITE SHOES"

WRITTEN BY ERIC LITWIN, ILLUSTRATED BY JAMES DEAN

Pete loves his white shoes, even when they change their color. This book has a definite pattern to the story that makes it predictable, but still fun.

**As you read this book:** Have the kids guess what will happen next – help them spot the pattern.

**Say to Caregivers:** Predicting what will happen next is part of pattern recognition and can also help your child develop narrative skills – it shows that they have a deep understanding of what is happening in the story and can confidently tell you what comes next.



# SONG: "THE HOKEY POKEY"

"The Hokey Pokey" is a fun song that has a lot of movements that are predictable and form a pattern. Once a child understands the basic pattern of the song, you can use almost any body part to extend the fun.

# BOOK 3: "THE GAME OF PATTERNS"

WRITTEN AND ILLUSTRATED BY HERVÉ TULLET

This book is full of patterns – how many can you spot? Being able to spot a pattern or a difference in a pattern is an important computer science skill.

# WRITING ACTIVITY: DRAW PATTERNS

On a large sheet of paper or white board, let the kids draw different patterns. Before you start, talk about the types of things you would want to draw (shapes, flowers, colors, etc.) and what pattern you want to make (AB, AAB, ABB, etc.). You can also give the kids stickers and have them create a pattern with the those.



# CLOSING COMMENT

Pattern recognition is both an important computer science skill and early literacy skill. Playing with patterns can help your child develop their abilities. Read books where you have to predict what will happen next, and find ways to play with and create patterns in your daily routine.

# **CLOSING SONG**

Just as with your opening song, use the same opening song during each storytime so that families know what to expect. Consistent elements of your storytime create an environment where kids know the rules (or the code!) for your program.

# **EXTENSION ACTIVITY**

Use rhythm instruments to create a pattern of sound. Guide the children through the pattern and then let them make up one of their own.